

## STDN DAILY REPORT FOR GMT DAYS 18, 19, 20 AND 21 JANUARY 2001

Part I. Operations

18 JANUARY

A. SN Anomalies: - None.

B. ISS/ECOMM Anomalies - None

C. GN Anomalies:

## 1. WGS/EO-1 Support

18/0217-0229Z

WGS reported 30 seconds after system initialization for EO-1 support, the link between PTP#1 and Node#2 failed. The Master indicated that the PTP was red. The site manually ran the PTP for support and pushed data file post pass. Reason for failure is unknown. TTR # 23485 CDS # 17881

### **PTP-1 FAILURE**

11 Meter 12 Mins. service loss recoverable

# 2. SGS/SAC-C Support

18/1315-1324Z

SGS reported no lock on the PSK Demod At AOS. Setup was controlled and found to be correct. The site tried using other receivers as input to Demod, but still no lock. A spare PSK Demod was used and the MOC reported receiving real-time data at 13:23:08. Troubleshooting post pass showed same results. No lock on prime PSK Demod, and lock on backup Demod. The prime PSK Demod does work for other satellites and further troubleshooting is needed. SGS will use the backup Demod for SAC-C until the problem is solved. TTR # 23486 CDS # 17883

#### PSK DEMODULATOR FAILURE

11 Meter 7 Mins. 55 Secs. service/data loss unknown if recoverable

# 3. AGS/SAS-C Support

18/2132-2147Z

Could not command spacecraft during support. Prepass command checks were good. During the support the project reported commands were not reaching the spacecraft. After troubleshooting the system, it was determined that the PTP would need to be recycled. This was determined at LOS-2m, so there was not time to fully power down the PTP during the support. The PTP was recycled postpass and the next support with SAC-C was a success. TTR # 23488 CDS ID # 17890

#### PTP FAILURE

TOTS-1 13 Mins. 40 Secs. Service Loss

# 4. WGS/TRACE Support

18/2259-2310Z

Auto sweeptermination failed after AOS. Manual terminate failed as well due to keyboard hang-up. Post pass reboot cleared problem. TTR # 23489 CDS ID # 17891

### STATION EQUIPMENT

TOTS 11 Mins. Service Loss

# 5. AGS/FAST Support

18/0011-0030Z

At AOS, we did not get bit sync lock. Oscilloscope display was flat lines, indicating analog matrix switch failure. Attempted to access analog matrix switch through the 'back door' to reconfigure, but the switch was locked up. Power cycled the analog matrix switch and reconfigured for FAST support. While still troubleshooting, contacted Leo-T operator so data source could be switched from TOTS-1 to Leo-T. Approx. 12 minutes of data lost while attempting to reconfigure analog matrix switch and during our investigation of the problem. New analog matrix switch has been ordered ref. DR#17844 & 17848. TTR # 23491 CDS ID # 17893

### STATION EQUIPMENT

TOTS-1 11 Mins. 34 Secs. Service/Data Loss Non-recoverable

# 6. WGS/ISS Support

18/0758-0808Z

Station experienced dropouts during support when the antenna stopped tracking for thirty to forty second intervals. Dropouts were approximately 5 seconds in duration each time. The reason for the antenna stopping is not known. The tracking computer continued to update the pointing angles during this time. TTR # 23493 CDS ID # 17896

### **UNKNOWN DROPOUTS**

10 Secs. Service/Data Loss Recoverable (Unknown)

- D. TDRS-4 West Stationkeeping maneuver was nominal.
- E. NAM 508 Scheduled TDRS-3 MA Service Outage was issued.
- 19 January
- A. SN Anomalies: None.
- B. ISS/ECOMM Anomalies None.
- C. GN Anomalies:

# 1. WGS/TOMS Support

19/0407-0410Z

Station could not lock to real-time dump data during support. The data was recorded on tape and is available for playback. Project reported that playback would need to completed in the AM. Post pass found VDA feeding the receiver video had a DC offset causing the problem. Reset VDA level and played back tape to Demod and confirmed good data. TTR # 23492 CDS ID # 17895

### STATION EQUIPMENT

9M 2 Mins. 24 Secs. Data Loss Recoverable

# 2. SKS/QUIKSCAT Support

19/1729-1925Z

SKS was unable to recover the 262K QuikSCAT Back-Orbit telemetry data due to a Combiner problem. The station is currently investigating the problem. TTR # 23495 CDS ID # 17899

#### STATION EQUIPMENT

30 Mins. Service/Data Loss Recoverable(Unknown)

# 3. PF1/LANDSAT-7 Support

19/1950-2001Z

Neither the primary or backup multi-mission receiver achieved lock on the X2 downlink due an incorrect input source setting of "test' instead of "normal" on both receivers. 10 minutes 05 seconds of X2 data lost. TTR # 23504 CDS ID # 17904

11M 1950-2001Z 10 Min. 05 Sec. Svc/Data Loss (Non-Recov)

# 4. WGS/IHP Support

19/2125-20/0502Z

During the support the X-axis stopped tracking causing the data to drop out. TTR # 23497 CDS ID # 17901

### STATION ANTENNA FAILURE

SATAN #2 30 Mins. Service Loss 1 Hr. 20 Mins. Data Loss Recoverable (Unknown)

20 January

### A. SN Anomalies:

## 1. TOPEX Support

20/2036-2041Z

The POCC experienced a **late acquisition**, reason unknown. This anomaly is under investigation. TTR # 23500

TDE 2036-2106Z 3 Mins. 42 Secs. Service/Data Loss

Recoverable

- B. ISS/ECOMM Anomalies None.
- C. GN Anomalies:

# 1. SGS/SAC-C Support

20/1117-1123Z

SGS reported no lock on Demodulator #2 At AOS. After investigating the anomaly the site found that the Demod had overheated due to a broken internal fan. The site switched over to Demod #1 and solid lock was established at 11:23:39Z. TTR # 23498 CDS # 17902

#### **DEMODULATOR FAILURE**

11 Meter 111723-113105Z 5 Mins. Service/Data loss unknown if recoverable

# 2. WGS/SWAS Support

20/1134-1145Z

WGS reported noise burst (RFI) at various times during support. This caused high errors on both VC dumps. The site also indicated CRC & sequence errors were also noticed during the event. The source of the RFI is unknown.

TTR # 23499 CDS # 17903

#### **RFI ANOMALY**

TOTS-3 11 Mins degraded data unknown if recoverable

## 3. PF1/LANDSAT-7 Support

20/2031-2046Z

Although the spacecraft was coherent, the exciter failed to apply modulation to the uplink. The operator re-swept and commanded the exciter to turn modulation on several times both remotely using the M&C software and locally from the front panel of the exciter during the support but modulation was never verified as being on by the Landsat-7 MOC. Following the support, the exciter was powered off/on and using the test inject system, the operator was able to verify that modulation was now being applied to the uplink. TTR # 23505 CDS ID # 17905

### **EQUIPMENT FAILURE**

11M 2031-2046Z 14 Min. 28 Sec. Svc/Data Loss (Recov)

D. TITAN II/DMSP-16 launch was scrubbed due to a problem commanding the spacecraft. New liftoff 021/1358-1408Z.

21 January

A. SN Anomalies:

# **LDBP Support**

21/1544-1610Z

T1 line outage resulted in no GCMR OR ODM capability. TTR # 23501,23502 AND 23503

#### **T1 LINE FAILURE**

LDPB 275 MA1F/R 1430-1830Z 18 Min. Svc Loss Only HST TDE MARF/R 1520-1613Z 14 Min. Svc Loss Only ISS TDS SSA1F/R 1545-1625Z 23 Min. 05 Sec. Svc Loss TRMM 171 SSA2F/R 1540-1600Z 15 Min. Svc Loss TERRA TDS SSA2F/R 1537-1602Z 17 Min Svc Loss UARS TDE MA3F/R 1603-1634Z 6 Min. 37 Sec. Svc Loss

### B. ISS/ECOMM Anomalies:

## 1. ISS Support

21/1545-1625Z

T1 line outage resulted in no GCMR OR ODM capability. TTR # 23501

### T1 LINE FAILURE

TDS SSA1F/R 1545-1625Z 23 Min. 05 Sec. Svc Loss

### C. GN Anomalies:

D. TITAN II/DMSP-16 launch was scrubbed due to Negative ignition at T-Zero. New liftoff 023/1358-1408Z.

# Part II. Testing Anomalies

A. SN Test - None.

B. GN Test - None.

# Part III. Equipment Status Changes

A Green Items Since Last Report:

WPS 919: LRSA:02-L6, Satan Receive Antenna #2, RY 01180500Z, GREEN: 01190035Z. Repaired logic bay cable.

### Part IV. Scheduled Activities

## Part V. Launch Forecast Changes

- \* 1.) W1502LS (LDBP) NET 22 JAN.,2001 T-0 = UNKNOWN
- \* 2.) M2098LS (STS-98/ISS-07,5A) 037 06 FEB.,2001 T-0 = 2336:54Z